

Antenna Specification

- 1) Frequency Range: 2.4GHz Band: 2402~2480[MHz]
5GHz Band : 5745~5805[MHz]
- 2) Antenna Type: Chip Antenna
- 3) Connector Type : None
- 4) Antenna Gain
2.4GHz Band Antenna_0(BT) : -12.3dBi
2.4GHz Band Antenna_1(Wi-Fi) : - 9.4dBi

5GHz Band Antenna_0 (Wi-Fi) : 1.1dBi
5GHz Band Antenna_1 (Wi-Fi) : 0.1dBi

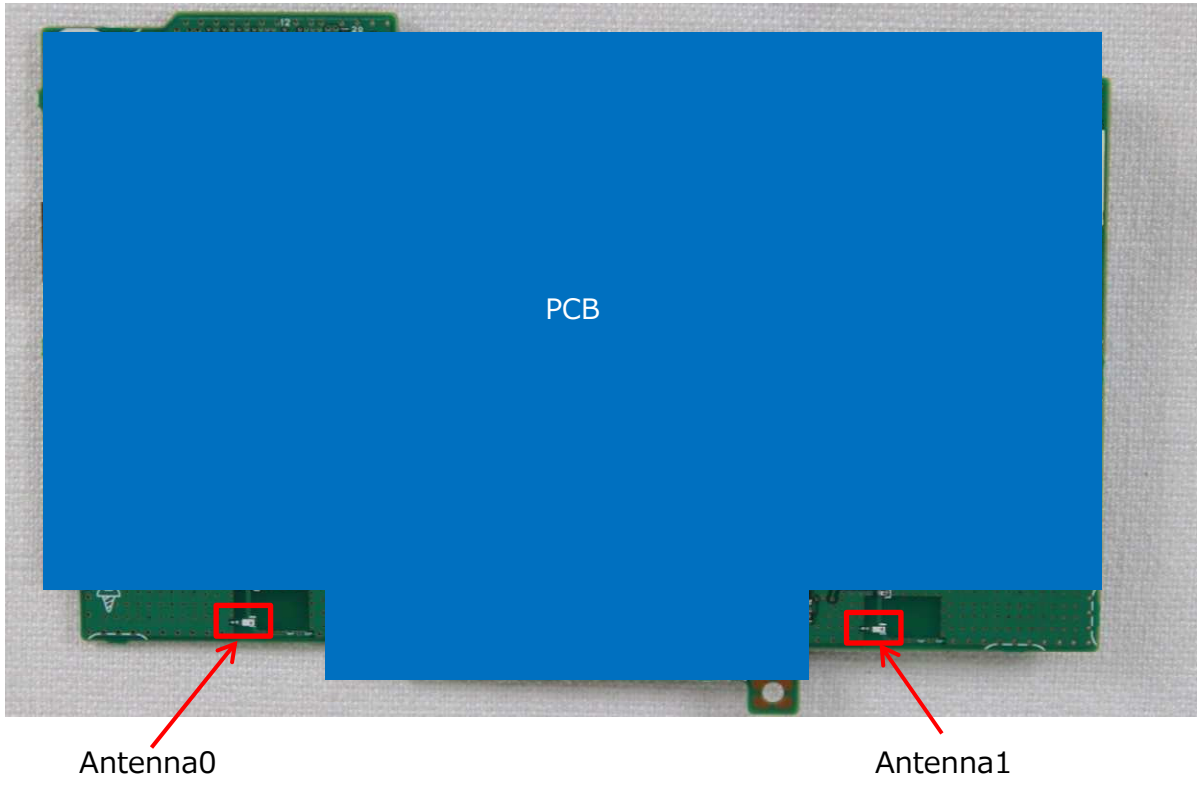
5) Appearance



Antenna on PCB is behind front panel



Antenna on



Antenna radiation pattern characteristics

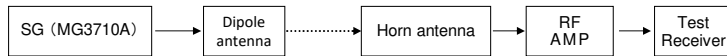
Purpose: Based on the 2.4GHz / 5GHz Dipole antenna, the omnidirectional antenna gain and radiation pattern will be measured.
Soft Ver:
Model: DMX809S

Criteria Dipole ANT: MA5612B4 (2.4GHz)
 MA5612C5 (5GHz)

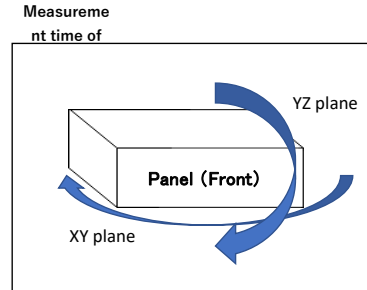
Location: Hachioji Semi-anechoic chamber

Test Method: The measurement system is as follows.
 The RF signal source of the set is Module output (@Test Mode), and when measuring the Dipole antenna, the RF signal corresponding to the Module output level of the set is generated from SG.
 The orientation of the set during measurement was the two planes shown on the right ("XY plane" and "YZ plane": ZX plane is omitted because it is impossible in actual use).

• **Dipole ANT Measurement system at the time of measurement**



• **Model Measurement system at the time of measurement**



Equipment list :

Item	Model Number	Manufacturer	Serial Number
SG MG3710A	MG3710A	Anritsu	6201371434
Dipole Antenna(2.4GHz)	MA5612B4	Anritsu	6201780211
Dipole Antenna(5GHz)	MA5612C5	Anritsu	6201780213
Horn Antenna	BBHA9120D	Schwarzbeck	01784
RF Amp	MLA-01118-J02-40	TSJ	16783
Test Receiver	ESR 7	Rohde & Schwarz	101918

Measurement:

No.	供試体 Specimen	Remarks	f[GHz]	X-Y Plane						Y-Z Plane						Correction Factor [dB]	
				Horizontal[dBi]			Vertical[dBi]			Horizontal[dBi]			Vertical [dBi]				
				Read	SG	Result	Read	SG	Result	Read	SG	Result	Read	SG	Result		
1	Standard Dipole Antenna	2.4GHz帯 For ANT0	2.402	2.0	-	-	-	-	-	-	-	-	-	-	-	0.16	
			2.441	2.0	-	-	-	-	-	-	-	-	-	-	-	-	0.49
			2.480	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-0.09
2	Standard Dipole Antenna	5GHz帯	5.745	2.0	-	-	-	-	-	-	-	-	-	-	-	10.08	
			5.775	2.0	-	-	-	-	-	-	-	-	-	-	-	10.65	
			5.805	2.0	-	-	-	-	-	-	-	-	-	-	-	-	10.28
3	2.4GHz	ANT_0 (BT)	2.402	-13.33	0.52	-13.7	-11.97	0.52	-12.3	-15.31	0.52	-15.7	-12.88	0.52	-13.2	0.16	
			2.441	-11.22	1.65	-12.4	-12.39	1.65	-13.6	-16.22	1.65	-17.4	-12.59	1.65	-13.8	0.49	
			2.480	-12.71	0.32	-13.1	-16.47	0.32	-16.9	-15.34	0.32	-15.8	-14.58	0.32	-15.0	-0.09	
4	2.4GHz	ANT_1 (WLAN)	2.412	-4.10	6.13	-10.4	-3.12	6.13	-9.4	-3.98	6.13	-10.3	-7.63	6.13	-13.9	-0.14	
			2.437	-4.12	9.11	-12.6	-4.11	9.11	-12.6	-2.88	9.11	-11.4	-7.75	9.11	-16.3	0.59	
			2.462	-8.55	5.02	-13.2	-6.00	5.02	-10.6	-6.56	5.02	-11.2	-9.15	5.02	-13.8	0.39	
5	5GHz	ANT_0 (WLAN)	5.745	-4.32	7.81	-2.1	-2.55	7.81	-0.3	-1.83	7.81	0.4	-2.83	7.81	-0.6	10.08	
			5.775	-6.47	7.98	-3.8	-3.72	7.98	-1.1	-1.56	7.98	1.1	-2.82	7.98	-0.2	10.65	
			5.805	-1.79	7.95	0.5	-1.99	7.95	0.3	-1.52	7.95	0.8	-3.06	7.95	-0.7	10.28	
6	5GHz	ANT_1 (WLAN)	5.745	-7.23	7.11	-4.3	-10.57	7.11	-7.6	-2.91	7.11	0.1	-11.19	7.11	-8.2	10.08	
			5.775	-7.54	7.22	-4.1	-11.74	7.22	-8.3	-5.96	7.22	-2.5	-11.85	7.22	-8.4	10.65	
			5.805	-7.81	7.17	-4.7	-9.74	7.17	-6.6	-8.21	7.17	-5.1	-11.76	7.17	-8.7	10.28	

Result= Read - SG + Correction factor